

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OHIO**

The Noco Company, Inc.,

Case No. 1:18cv2780

**Plaintiff,
-vs-**

JUDGE PAMELA A. BARKER

SmarTech Products, Inc., et al.,

Defendants

**MEMORANDUM OPINION AND
ORDER**

This matter is before the Court to construe the disputed terms of Claims 1, 9 and 19 of U.S. Patent No. 9,007,015. (Doc. Nos. 31, 32, 34, 35.) Also pending is Plaintiff's Renewed Motion to Strike, in part, Defendants' Amended Invalidity Contentions. (Doc. No. 28.) For the reasons that follow, Plaintiff's Renewed Motion to Strike is DENIED. The Court's construction of Claims 1, 9 and 19 of U.S. Patent No. 9,007,015 is set forth below.

I. Relevant Background

On November 30, 2018, Plaintiff The Noco Company, Inc. (hereinafter "Plaintiff" or "Noco") filed a Complaint against SmarTech Products, Inc. alleging various claims under federal and state law for trade dress and trademark infringement and dilution, unfair competition, and deceptive trade practices. (Doc. No. 1.)

Several months later, on March 4, 2019, Plaintiff filed an Amended Complaint against Defendants SmarTech Products, Inc. and SmarTech, Inc.¹, alleging the following: (1) trade dress infringement and unfair competition under the Lanham Act, 15 U.S.C. §§ 1114 and 1125(a) (Counts

¹¹ Plaintiff also named The Home Depot, Inc. as a Defendant in the Amended Complaint. (Doc. No. 7.) On April 29, 2019, this Court entered a Stipulation & Order to dismiss The Home Depot, Inc., without prejudice pursuant to Fed. R. Civ. P. 41(a)(1)(A)(ii). (Doc. No. 22.)

One and Two); (2) trademark infringement and unfair competition under the Lanham Act, 15 U.S.C. §§ 1114 and 1125(a) (Counts Three and Four); (3) deceptive trade practices under Ohio Rev. Code §§ 4165.01 – 4165.04 (Count Five); and (4) Patent Infringement of U.S. Patent No. 9,007,015 under 35 U.S.C. § 271 (Count Six). (Doc. No. 7.)

Relevant to Plaintiff’s patent infringement claim, the Amended Complaint alleges the following. Plaintiff designs and creates premium consumer battery chargers, jump starters, and other portable power devices used primarily in the automotive and maritime industries. (*Id.* at ¶ 9.) In 2014, Plaintiff introduced a lithium ion battery powered jump starter, known as the NOCO Genius Boost. (*Id.* at ¶ 27.) On July 3, 2014, Plaintiff filed a utility patent application covering the NOCO Genius Boost jump starter, which was granted and issued on April 14, 2015 as U.S. Patent No. 9,007,015 (“the ‘015 Patent”). (*Id.* at ¶ 30.)

The ‘015 Patent “discloses and claims a handheld device for jump starting a vehicle engine that includes a lithium ion battery and a microcontroller (computer) as well as sensors to detect whether (1) the device is connected to both terminals of a vehicle battery, and (2) whether the connection is the proper polarity—i.e., whether or not the positive charging clamp is connected to the positive battery terminal and the negative charging clamp is connected to the negative terminal.” (*Id.* at ¶ 31.) According to Plaintiff, “[t]he microcontroller is configured (i.e., programmed) to instruct the charger to provide power to the charging clamps only when the sensors provide signals that the charger is fully connected to the battery, and that the connection is in the correct polarity.”² (*Id.*)

² As explained in the specification to the ‘015 Patent, one of the purposes of the invention was to address problems with previous art which displayed certain safety issues; i.e., “when either the jumper terminals or clamps of the cables were inadvertently brought into contact with each other while the other ends were connected to a charged battery, or when the positive and negative terminals were connected to the opposite polarity terminals in the vehicle to be jumped, thereby causing a short circuit resulting in sparking and potential damage to batteries and/or bodily injury.” See ‘015 Patent at

Plaintiff alleges that “Defendants infringe the ‘015 Patent in violation of 35 U.S.C. § 271 by making, using, selling, offering to sell and/or importing at least the following models of compact lithium jump starters sold under the brand name Smartech that have safety features claimed in the ‘015 patent: the JS-15000 smarter™ Portable 15000mAh Lithium Powered Vehicle Jump Starter/Power Bank, JS-10000 smarter™ Portable 10000mAh Lithium Vehicle Jump Starter/Power Bank and the JS-8000 smarter™ Portable 8000mAh Lithium Vehicle Jump Starter/Power Bank (collectively, the “Infringing Models”).” (*Id.* at ¶ 33.)

On March 6, 2019, then-assigned District Judge Patricia Gaughan conducted a Case Management Conference, at which various case management deadlines were set including the exchange of initial infringement, non-infringement, and invalidity contentions and productions. (Doc. No. 12.)

On March 18, 2019, Defendant SmarTech Inc. filed its Answer, Affirmative Defenses, and Counterclaims. (Doc. No. 16.) Among other things, Defendant asserted counterclaims for declaratory judgment of non-infringement and invalidity of the ‘015 Patent. (*Id.*) With regard to its invalidity counterclaim, Defendant alleged that “[a]ll claims set forth in the ‘015 patent are invalid for failure to comply with the conditions of patentability set forth in 35 U.S.C. §§ 102, 103 and/or 112.” (*Id.* at ¶ 70.) Defendant explained that “for example, and without limitation, the claims of the ‘015 patent are invalid under 35 U.S.C. §§ 102 and/or 103 because they are anticipated or rendered obvious by prior art and/or prior use.” (*Id.*)

Col. 1, Ins 16-23. The instant invention is designed to address these safety issues by disclosing a design whereby the microcontroller is programmed to instruct the charger to provide power to the charging clamps only when sensors indicate that they are properly connected.

On June 26, 2019, this matter was transferred to the undersigned pursuant to General Order 2019-013.

On July 9, 2019, Plaintiff filed a Motion to Strike Defendants' Invalidity Contentions on the grounds that Defendants failed to comply with the requirements of Local Patent Rule 3.5(c). (Doc. No. 23.) Defendant SmarTech filed a Brief in Opposition, to which Plaintiff replied. (Doc. Nos. 25, 26.)

On July 31, 2019, the Court conducted a status conference with counsel during which the Plaintiff's Motion to Strike was discussed. (Doc. No. 27.) In a Minute Order issued that date, the Court noted that it had "evaluated the positions of the parties relative [to Plaintiff's Motion], to include confirming that counsel for Defendants can and will correct the deficiencies regarding its invalidity contentions by August 7, 2019, and that the other dates set in this case will not be affected." (*Id.*) Accordingly, the Court denied Plaintiff's Motion and ordered that counsel for Defendants serve Plaintiff's counsel with its amended invalidity contentions by August 7, 2019. (*Id.*)

On August 12, 2019, Plaintiff filed a Renewed Motion to Strike, in part, Defendant's Amended Invalidity Contentions, in which it argued that Defendants had still not complied with Local Patent Rule 3.5(c). (Doc. No. 28.) Defendant filed a Brief in Opposition, to which Plaintiff replied. (Doc. Nos. 29, 30.)

The parties thereafter filed their Markman Briefs on October 3, 2019. (Doc. Nos. 31, 32.) Responses were filed on October 31, 2019. (Doc. Nos. 34, 35.) On November 5, 2019, the parties filed their Joint Claim Construction and Prehearing Statement. (Doc. No. 36.)

II. Renewed Motion to Strike Invalidity Contentions (Doc. No. 28)

In its Renewed Motion to Strike, Plaintiff argues that Defendant's Amended Invalidity Contentions relating to Claim 1 should be stricken because they fail to comply with Local Patent Rule 3.5(c).³ (Doc. No. 28.) That Rule provides as follows:

Not later than eighty (80) days after service of the Responsive Pleading, each party asserting that a claim of a patent is invalid or unenforceable, shall serve on all parties its Invalidity and Unenforceability Contentions which shall contain at least the following information:

- (a) The identity of each item of prior art that allegedly anticipates each asserted claim or renders it obvious. Each prior art patent shall be identified by its number, country of origin, and date of issue. Each prior art publication shall be identified by its title, date of publication, and where feasible, author and publisher. ***
- (b) Whether each item of prior art anticipates each asserted claim or renders it obvious under 35 U.S.C. §102 or §103. If obviousness is alleged, an explanation of why the prior art renders the asserted claim obvious, including an identification of any combinations of prior art showing obviousness;
- (c) For each alleged item of prior art, a chart identifying specifically where each limitation of each asserted claims are found, including for each limitation that such party contends is governed by 35 U.S.C. § 112(6), the identity of the structure(s), act(s), or material(s) in each item of prior art that performs the claimed function; *****

Local Patent Rules 3.5(a) – (c) (emphasis added).

Plaintiff argues that Defendant's Amended Invalidity Contentions do not satisfy Rule 3.5(c) because they “fail to specifically identify where within each alleged prior art reference (e.g. Thomason, Dao, Xinfang, etc.) one can find each claim 1 limitation (e.g., the claimed ‘output port’

³ Plaintiff's Renewed Motion to Strike relates only to Defendant's invalidity contentions as to Claims 1A, 1B, and 1C of the '015 Patent. (Doc. No. 28.) Defendant's invalidity contention as to Claim 1A is as follows: “Claim 1 is obvious under 35 U.S.C. § 103 when the teachings of Thomason '467, in view of Dao '488 and Xinfang '466 are combined.” (Doc. No. 28-1.) Defendant's invalidity contention as to Claim 1B states: “Claim 1 is obvious under 35 U.S.C. § 103 when the teachings of Krieger '698 and Xinfang '446 are combined.” (*Id.*) Finally, Defendant's invalidity contention as to Claim 1C is as follows: “Claim 1 is obvious under 35 U.S.C. § 103 [when] the teachings of Purkey '174 and Xinfang '446 are combined.” (*Id.*)

or ‘vehicle battery isolation sensor’ or ‘reverse polarity sensor.’.” (Doc. No. 28 at p. 4.) Rather, Plaintiff claims that Defendant “merely asserts that all of these limitations are allegedly somewhere in the combination of the various prior art references.” (*Id.*) Plaintiff maintains that it is prejudiced because “by refusing to comply with its disclosure obligations, defendants are attempting to obscure the nature and scope of their alleged prior art, conceal their invalidity theories, and hide possible claim construction disputes.” (*Id.* at p. 5.)

Defendant argues that Plaintiff’s Motion should be denied because Defendant properly identified the relevant prior art in its recitation of Claim 1 on pages 2 and 3 of its Amended Preliminary Invalidity Contentions. (Doc. No. 29 at p. 2.) Specifically, Defendant notes that, in the narrative portion of its Amended Invalidity Contentions, it explains as follows:

Claim 1 of the ‘015 Patent was rejected as being obvious under 35 U.S.C. § 103 by the Patent Examiner in the prosecution of the application in the U.S. Patent Office. In order to overcome this prior art rejection, the applicant amended Claim 1 with new limiting language shown by the underlined portion below. This language was found by the Patent Examiner to make the claim allowable:

1. Apparatus for jump starting a vehicle engine, comprising:
 - an internal power supply;
 - an output port having positive and negative polarity outputs;
 - a vehicle battery isolation sensor connected in circuit with said positive and negative polarity outputs, configured to detect presence of a vehicle battery connected between said positive and negative polarity outputs;
 - a reverse polarity sensor connected in circuit with said positive and negative polarity outputs, configured to detect polarity of a vehicle battery connected between said positive and negative polarity outputs and to provide an output signal indicating whether positive and negative terminals of said vehicle battery are properly connected with said positive and negative polarity outputs of said output port;

a power switch connected between said internal power supply and said output port; and

a microcontroller configured to receive input signals from said vehicle isolation sensor and said reverse polarity sensor, and to provide an output signal to said power switch, such that said power switch is turned on to cause said internal power supply to be connected to said output port in response to signals from said sensors indicating the presence of a vehicle battery at said output port and proper polarity connection of positive and negative terminals of said vehicle battery with said positive and negative polarity outputs, and is not turned on when signals from said sensors indicate either the absence of a vehicle battery at said output port or improper polarity connection of positive and negative terminals of said vehicle battery with said positive and negative polarity outputs.

(Doc. No. 28-1 at pp. 2-3.) In response to Plaintiff's Renewed Motion to Strike, Defendant explains that “[t]he thrust of SmarTech's contention with respect to Claim 1 is that NOCO is estopped under the doctrine of file wrapper estoppel to now argue that the language in Claim 1 that was rejected by the Examiner (i.e., the non-underlined portions of Claim 1) is novel.” (Doc. No. 29 at p. 2.) Defendant asserts that “the prior art upon which SmarTech relies includes the non-underlined portions of Claim 1, which the Examiner already found is derived from Thomason '467 in view of Dao '488.” (*Id.*)

Defendant further maintains that “[t]he additional prior art upon which SmarTech relies with respect to Claim 1 is directed at and applied to the underlined language.” (*Id.*) In this regard, Defendant provides the following additional explanation of its invalidity contentions:

To be clear, the Xinfang patent '446 reference discloses a circuit board with an LED module which provides an output signal (LED) indicating a test circuit 64 for testing the battery voltage (col. 6, ln. 55 to col. 7, ln. 3), and an over discharge circuit 68 (col. 6 ln. 56). This easily could be modified by someone skilled in the art to provide detection on proper battery pole connection. Furthermore, the Krieger et al. patent 7,656,118 discloses reverse polarity protection (col. 5, lns. 19-29; col. 6, lns. 1-37; col. 7, lns. 23-49; col. 8, lns. 31-67; col. 9, lns. 1-36; col. 10, lns. 42-62); and the Purkey patent publication '174 discloses the isolation circuit 40 (para. 0017, 0020-0023, 0048,

0049, and 0053-0056). These circuits would teach someone skilled in the art to easily modify the device taught by Thompson ‘467 and Dao ‘488 to obtain the claimed results of Claim 1 of the patent in suit.

(*Id.* at p. 3.) Defendant maintains that its invalidity contentions are sufficient and “in any event the foregoing discussion should ameliorate any concerns that NOCO purports to have” regarding the sufficiency of SmarTech’s invalidity contentions. (*Id.* at p. 5.)

In its Reply Brief, Plaintiff argues that the additional information provided in Defendant’s brief in opposition should have been included in its invalidity contention charts. (Doc. No. 30 at p. 2.) Plaintiff further asserts that “file wrapper estoppel” is not applicable to the literal scope of the claims and that, in any event, Defendant should have incorporated the specific information on which its estoppel theory relies into the invalidity contention chart. (*Id.*) Plaintiff argues that “there is real prejudice to NOCO because it is being forced to progress through claim construction without legitimate invalidity contentions” and maintains that there should be “some repercussions” for Defendant’s alleged failure to satisfy its obligations under the Local Rules. (*Id.*) Plaintiff asserts that “the deficient contentions regarding claim 1 should be stricken and defendants precluded in this action from asserting invalidity contentions with respect to the limitations of claim 1.” (*Id.* at p. 6.)

Contentions under the Local Patent Rules are meant to provide “reasonable notice” of the reasons why a party “believes it has a reasonable chance of proving” its claims and defenses. *Datatrak Intl., Inc. v. Medidata Sols., Inc.*, 2015 WL 12734894 at *3 (N.D. Ohio, July 10, 2015). See also *Hytera Communications Corp., Ltd. v. Motorola Solutions, Inc.*, 2019 WL 3006825 at * 1 (N.D. Ohio July 10, 2019). “They do not require disclosure of all of the specific evidence that a party will rely on to prove their position.” *Hytera Communications Corp., Ltd.*, 2019 WL 3006825 at * 1 (citing *Core Wireless Licensing, S.A.R.L. v. LG Elecs., Inc.*, 2016 WL 3655302 at *1, 4 (E.D. Tex. 2016)).

The Court has carefully reviewed the parties' briefs, as well as the Defendant's Amended Invalidity Contentions. Based on that review, the Court cannot say that the Defendant's initial contentions are so deficient that they should be stricken. While the invalidity contention chart itself could have included greater detail, Defendant provides additional explanations of the bases of its invalidity contentions with respect to Claims 1A, 1B, and 1C in (1) the narrative preceding the chart in its Amended Preliminary Invalidity Contentions (Doc. No. 28-1 at pp. 2-3); and (2) the more detailed explanation set forth on page 3 of its Brief in Opposition (Doc. No. 29) to Plaintiff's Renewed Motion to Strike, set forth above. Indeed, with respect to the latter, Plaintiff appears to acknowledge that this description would have satisfied Local Rule 3.5(c) had it been included in the chart. (Doc. No. 30 at pp. 2-3.)

Certainly, it would have been preferable for Defendant to have included the additional information provided in its Brief in Opposition to Plaintiff's Renewed Motion in its Amended Preliminary Invalidity Contentions. However, the Court finds that Plaintiff has not demonstrated that it has been prejudiced to an extent that would warrant the rather drastic sanction of striking Defendant's invalidity contentions as to this key Claim. *See Braun v. Ultimate Jetcharters, Inc.*, 2014 WL 12584328 at * 1 (N.D. Ohio Feb. 25, 2014) (finding that motions to strike are disfavored because they are a "drastic remedy"). *See also Datatrak*, 2015 WL 12734894 at * 3 (declining to strike contentions where defendant had reasonable notice of plaintiff's infringement contentions); *Hytera*, 2019 WL 3006825 at * 2 (same). Under the particular circumstances presented, the Court finds that this litigation would be better served through resolution of the issues on the merits rather than through a motion to strike.

Accordingly, Plaintiff's Renewed Motion to Strike, in Part, Defendant's Amended Preliminary Invalidity Contentions (Doc. No. 28) is denied.

III. Claims Construction

A. Standard of Review

An infringement analysis entails two steps. The first step is determining the meaning and scope of the patent claims asserted to be infringed. The second step is comparing the properly construed claims to the product accused of infringing. *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996). It is the first step, commonly known as claim construction or interpretation, that is at issue at this juncture.

Construction of patent claims is a question of law for the Court. *Markman*, 52 F.3d at 970-71. In construing claim terms, “the analytical focus must begin and remain centered on the language of the claims themselves, for it is that language that the patentee chose to use to ‘particularly point[] out and distinctly claim[] the subject matter which the patentee regards as his invention.’” *Interactive Gift Express, Inc. v. Compuserve, Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001) (quoting 35 U.S.C. § 112, ¶ 2). “Words of a claim ‘are generally given their ordinary and customary meaning.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). The ordinary and customary meaning of a claim term “is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention[.]” *Id.* at 1313 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). “Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Id.*

Accordingly, the first step is to look to the claim itself. *See Verbovsky v. Goodbaby Int'l Holdings, Inc.*, 2017 WL 3840416 at *1 (N.D. Ohio Sept. 1, 2017). As the Federal Circuit has explained, “the context in which a term is used in the asserted claim can be highly instructive.” *Phillips*, 415 F.3d at 1314. Additionally, because claim terms are normally used consistently throughout the patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims. *Id.* Moreover, it is important to remember that, “[i]n some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Id.* at 1314. In these situations, a general purpose dictionary can be helpful. *Id.*

While the language of the claim itself is critical to a court’s analysis, “[t]he claims . . . do not stand alone.” *Id.* at 1315. Rather, “they are part of ‘a fully integrated written instrument,’ *Markman*, 52 F.3d at 978, consisting principally of a specification that concludes with the claims.” *Id.* For that reason, claims “must be read in view of the specification, of which they are a part.” *Markman*. 52 F.3d at 979. Indeed, the specification “is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.” *Phillips*, 415 F.3d at 1315. As explained by the Federal Circuit:

Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.

Id. at 1316 (quoting *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998)). However, while the court may look to the specification to interpret the meaning of a claim term, it may not read a limitation from the written description into a claim. *Id.* at 1323.

A court may also consider the patent's prosecution history when conducting claim construction. *Id.* at 1317. The prosecution history, which is designated as part of the "intrinsic evidence," consists of the complete record of the proceedings before the Patent and Trademark Office ("PTO") and includes the prior art cited during the examination of the patent. *Id.* Like the specification, the prosecution history "provides evidence of how the PTO and the inventor understood the patent." *Id.* Indeed, the "prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be."

Id. See also *Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005).

All other evidence is considered "extrinsic" and may be relied upon by the court in its discretion. *Markman*, 52 F.3d at 980; *Phillips*, 415 F.3d at 1317. Extrinsic evidence, however, is less reliable than intrinsic evidence in determining how to read claim terms. *Phillips*, 415 F.3d at 1318. Thus, a court should restrict its reliance on extrinsic evidence to educating itself regarding the field of invention or to determining what a person of ordinary skill in the art would have understood the claim terms to mean. *Id.* at 1319; see also *Markman*, 52 F.3d at 986 ("It is not ambiguity in the document that creates the need for extrinsic evidence but rather unfamiliarity of the court with the terminology of the art to which the patent is addressed."). Extrinsic evidence may not be used to vary or contradict the terms of the claims. *Markman*, 52 F.3d at 981.

B. Analysis

In their Markman Briefs, the parties address various terms in Claims 1, 9 and 19 of the '015 Patent. The Court will address the parties' arguments with respect to each Claim separately, below.

1. Claim 1

Claim 1 states as follows:

1. Apparatus for jump starting a vehicle engine, comprising:

an internal power supply;

an output port having positive and negative polarity outputs;

a vehicle battery isolation sensor connected in circuit with said positive and negative polarity outputs, configured to detect presence of a vehicle battery connected between said positive and negative polarity outputs;

a reverse polarity sensor connected in circuit with said positive and negative polarity outputs, configured to detect polarity of a vehicle battery connected between said positive and negative polarity outputs and to provide an output signal indicating whether positive and negative terminals of said vehicle battery are properly connected with said positive and negative polarity outputs of said output port;

a power switch connected between said internal power supply and said output port; and

a microcontroller configured to receive input signals from said vehicle isolation sensor and said reverse polarity sensor, and to provide an output signal to said power switch, such that said power switch is turned on to cause said internal power supply to be connected to said output port in response to signals from said sensors indicating the presence of a vehicle battery at said output port and proper polarity connection of positive and negative terminals of said vehicle battery with said positive and negative polarity outputs, and is not turned on when signals from said sensors indicate either the absence of a vehicle battery at said output port or improper polarity connection of positive and negative terminals of said vehicle battery with said positive and negative polarity outputs.

'015 Patent at Col. 8 Ins. 4-37 (Doc. No. 7-4 at PageID#98.)

The parties disagree as to the proper construction of seven key terms within Claim 1. For each of these terms, Plaintiff argues that no construction is necessary. (Doc. No. 32.) Plaintiff asserts generally that “there is no legitimate reason to construe the claim terms in a manner that departs from their ordinary meaning as understood by a person of ordinary skill in the art because no terms were defined during the prosecution of the ‘015 Patent.’” (*Id.* at p. 3.) Thus, Plaintiff maintains that “a proper construction of the claims’ terms should be either apparent from the terms themselves, as used in the particular claim, or with reference to their use in the ‘015 Patent’s specifications.” (*Id.*)

To the extent that this Court believes construction is necessary, Plaintiff notes that many of the particular claim terms in the ‘015 Patent that are at issue herein were recently construed by another Judge in this District in *The Noco Company, Inc. v. Shenzhen Changxinyang Technology, Ltd.*, Lead Case No. 1:17cv2282, 2019 WL 1723358 (N.D. Ohio) (Boyko, J.) In that case, the court appointed a Special Master to render proposed constructions of various disputed claim terms in the ‘015 Patent. *Id.* at * 2. The Special Master issued a Report & Recommendation in which he recommended constructions of several terms which are at issue in the instant case. (Doc. No. 32-1.) After considering the parties’ objections to certain terms, Judge Boyko subsequently accepted and adopted the Special Master’s recommendations. *See Noco v. Shenzhen*, 2019 WL 1723358 at * 4. Here, Plaintiff argues that, to the extent this Court deems construction necessary, the Court should adopt the Special Master’s constructions of the various terms that are at issue herein.

Defendant SmarTech believes that each of the seven disputed terms require construction by this Court. (Doc. No. 31.) The seven key terms at issue and Defendant’s proposed constructions of each term are summarized below:

Term or Phrase	SmarTech's Proposed Construction
internal power supply	power supply contained within the apparatus
output port	external opening in device through which power from an internal power supply is supplied or transmitted
vehicle battery isolation sensor connected in circuit	a vehicle battery isolation sensor separate from the reverse polarity sensor
reverse polarity sensor connected in circuit	a reverse polarity sensor separately connected to a distinct circuit from the vehicle battery isolation sensor
power switch connected between said internal power supply and said output port	power switch is in electronic communication with and physically positioned between the internal power supply, which is housed in the apparatus, and the output port
input signals from said vehicle isolation sensor and said reverse polarity sensor	an input signal received from said vehicle isolation sensor and a separate input signal received from said reverse polarity sensor
such that said power switch is turned on to cause said internal power supply to be connected to said output port in response to signals from said sensors indicating the presence of a vehicle battery at said output port and proper polarity connection of positive and negative terminals of said vehicle battery with said positive and negative polarity outputs, and is not turned on when signals from said sensors indicate either the absence of a vehicle battery at said output port or improper polarity connection of positive and negative terminals of said vehicle battery with said positive and negative polarity outputs	such that said power switch is turned on to cause the internal power supply to be connected to the output port in response to a signal from the vehicle battery isolation sensor indicating the presence of a vehicle battery at the output port and a separate signal from the reverse polarity sensor indicating proper polarity connection of positive and negative terminals of the vehicle battery with the positive and negative polarity outputs, and is not turned on when the signal from the battery isolation sensor indicates the absence of a vehicle battery at the output port or when the reverse polarity sensor indicates improper polarity connection of positive and negative terminals of the vehicle battery with the positive and negative polarity outputs

In summary, Defendant argues that its “proposed construction of Claim 1 recognizes that (1) the vehicle battery isolation sensor and the reverse polarity sensor are separate and distinct sensors that send separate and distinct signals to the microcontroller and are separate from the jumper cables

and (2) that the power switch is located within the device between the internal power supply and the output port to turn on and off the power connection between the two.” (Doc. No. 31 at p. 11.)

The Court will address the parties’ arguments with respect to each of the specifically disputed terms separately.

a. “Internal power supply”

Defendant argues, summarily, that the term “internal power supply” should be construed as meaning “power supply contained within the apparatus.” (Doc. No. 31 at p. 11.) In support, Defendant cites the definition of the term “internal” in the Merriam-Webster Dictionary as “existing or situated within the limits or surface of something.” (*Id.*) Defendant maintains, without further explanation, that its proposed construction “recognizes the plain and ordinary meaning of the claim language.” (*Id.*)

Plaintiff first notes that this particular claim term was not construed by the Special Master and/or Judge Boyko in *Noco v. Shenzhen, supra*. Plaintiff does not believe, however, that any construction of this term is necessary. (Doc. No. 32 at p. 13.) Specifically, Plaintiff asserts that “non-technical terms, such as ‘internal,’ should not be construed for the trier of fact.” (Doc. No. 35 at p. 17.) Plaintiff argues that “SmarTech provides no explanation why a lay juror would not be able to understand what the word ‘internal’ means,” noting that “the only justification SmarTech provides is that its construction is consistent with the claim language.” (*Id.*) Plaintiff maintains that “mere consistency with the patent is not a reason to construe non-technical terms for the finder of fact.” (*Id.*)

Plaintiff further argues that this Court should not adopt Defendant’s proposed construction because Defendant is “attempting impermissibly to restrict claim 1 of the ‘015 Patent to its preferred

embodiment by defining the term ‘internal’ to mean ‘contained within the apparatus.’” (Doc. No. 32 at p. 13.) Plaintiff argues that the invention described in Figures 1 through 4 of the ‘015 Patent “encompasses more than just the preferred embodiment: it encompasses ‘[a]ny and all such variations . . . within the scope of’ claims 1 through 23.” (*Id.* citing ‘015 Patent, Col. 8, lns 1-2.)

The Court finds that Defendant has failed to demonstrate that construction of the term “internal power supply” is necessary. The Federal Circuit has recognized that “district courts are not (and should not be) required to construe every limitation present in a patent's asserted claims.” *O2 Micro Intern. Ltd. v. Beyond Innovation Tech. Co., Ltd*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (citing *Biotec Biologische Naturverpackungen GmbH & Co. KG v. Biocorp, Inc.*, 249 F.3d 1341, 1349 (Fed. Cir. 2001) and *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997)). Rather, “[c]laim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement.” *U.S. Surgical*, 103 F.3d at 1568. “A determination that a claim term ‘needs no construction’ or has the ‘plain and ordinary meaning’ may be inadequate when a term has more than one ‘ordinary’ meaning or when reliance on a term's ‘ordinary’ meaning does not resolve the parties' dispute.” *Id.* at 1361. In sum, “[w]hen the parties present a fundamental dispute regarding the scope of a claim term, it is the court's duty to resolve it.” *O2 Micro Intern.*, 521 F.3d at 1362.

Here, Defendant does not sufficiently explain why the term “internal power supply” requires construction for the trier of fact. Defendant's entire argument with respect to this term (in both its Opening Claims Construction Brief and Response Brief) is one short paragraph. Defendant does not articulate how construction of the term “internal power supply” would resolve a fundamental dispute between the parties, nor does it sufficiently argue that the term's ordinary meaning is otherwise

insufficient to explain what is covered by the claim. In the absence of any meaningful argument establishing that construction of the term “internal power supply” is necessary to resolve a fundamental dispute regarding the ‘015 Patent, the Court declines to construe this term. Accordingly, based on the arguments presented herein, the Court finds that Defendant has failed to show that the term “internal power supply” requires construction.

Moreover, the Court notes that, aside from a brief reference to the Merriam-Webster Dictionary, Defendant does not present any meaningful argument to support its proposed construction that the term “internal” means “contained within the apparatus.” Notably, Defendant cites no language in the claim itself, or the specification, to support its proposed construction of this specific term. Nor does Defendant cite any sources from the prosecution history to support its position that the term “internal power supply” should be construed as being limited to a “power supply contained within the apparatus.”

As Plaintiff notes, the ‘015 Patent provides that “[t]he invention having been thus described, it will be apparent to those skilled in the art that the same may be varied in many ways without departing from the spirit or scope of the invention.” *See* ‘015 Patent, Col. 7, lns 65-67 to Col 8., ln 1. The ‘015 Patent further states that “[a]ny and all such variations are intended to be encompassed within the scope of the following claims.” ‘015 Patent, Col. 8, lns 1-2.

Thus, although the Figures in the specification to the ‘015 Patent may show the “internal power supply” as being contained within the apparatus, it does not necessarily follow that the term “internal power supply” should be restricted in this fashion. Indeed, in *Phillips, supra*, the Federal Circuit explained as follows:

[T]he line between construing terms and importing limitations [from the specification] can be discerned with reasonable certainty and predictability if the court's focus

remains on understanding how a person of ordinary skill in the art would understand the claim terms. For instance, although the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments. *See, e.g., Nazomi Communications, Inc. v. ARM Holdings, PLC*, 403 F.3d 1364, 1369 (Fed.Cir.2005) (claims may embrace “different subject matter than is illustrated in the specific embodiments in the specification”); *Liebel-Flarsheim*, 358 F.3d at 906–08; *Teleflex*, 299 F.3d at 1327; *SRI Int'l v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1121 (Fed.Cir.1985). In particular, we have expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment. *Gemstar-TV Guide*, 383 F.3d at 1366. That is not just because section 112 of the Patent Act requires that the claims themselves set forth the limits of the patent grant, but also because persons of ordinary skill in the art rarely would confine their definitions of terms to the exact representations depicted in the embodiments.

To avoid importing limitations from the specification into the claims, it is important to keep in mind that the purposes of the specification are to teach and enable those of skill in the art to make and use the invention and to provide a best mode for doing so. *See Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1533 (Fed.Cir.1987). One of the best ways to teach a person of ordinary skill in the art how to make and use the invention is to provide an example of how to practice the invention in a particular case. Much of the time, upon reading the specification in that context, it will become clear whether the patentee is setting out specific examples of the invention to accomplish those goals, or whether the patentee instead intends for the claims and the embodiments in the specification to be strictly coextensive. *See SciMed Life Sys.*, 242 F.3d at 1341. The manner in which the patentee uses a term within the specification and claims usually will make the distinction apparent. *See Snow v. Lake Shore & M.S. Ry. Co.*, 121 U.S. 617, 630, 7 S.Ct. 1343, 30 L.Ed. 1004 (1887) (it was clear from the specification that there was “nothing in the context to indicate that the patentee contemplated any alternative” embodiment to the one presented).

Phillips, 415 F.3d at 1323.

Here, Defendant has not demonstrated that the term “internal power supply” should be restricted to its “preferred embodiment” of “power supply within the apparatus.” As noted above, Defendant does not cite any language in the claim, specifications, or the prosecution history that would support such a construction. Nor does Defendant address the language cited by Plaintiff that “[a]ny and all such variations are intended to be encompassed within the scope of the following claims.” *See* ‘015 Patent, Col. 8, lns 1-2.

Accordingly, the Court rejects Defendant's proposed construction of the term "internal power supply" and, further, agrees with Plaintiff that Defendant has failed to demonstrate that this particular term requires construction.

b. "Output port"

Defendant argues that the term "output port" should be construed to mean an "external opening in device through which power from an internal power supply is supplied or transmitted." (Doc. No. 31 at p. 12.) Defendant argues that:

As shown in Figures 3 and 4 [of the specification], the output port 303 receives plug 401 of the jumper cable. To do so, the output port must be an external opening on the housing of the device as shown in Figure 3. See '015 Patent, col. 7, ll. 30-35. The specification also recognizes that the port must exist to receive the plug of the jumper cables, noting that "[d]evice 400 has a plug 401 configured to plug into 12 volt output port 30." Id. at col. 7, ll. 47-49; see also, Id. at col. 7, ll 61-64 ("In the event that the battery voltage becomes depleted, the handheld booster device 300 should be properly connected to the battery very simply by plugging in the plug 401 to the port 303").

Finally, the '015 patent describes how the output port is customized to receive the plug: "The port 303 and plug 401 may be dimensioned so that the plug 401 will only fit into the port 303 in a specific orientation, thus ensuring that clamp 403a will correspond to positive polarity and clamp 403b will correspond to negative polarity, of the handheld device 300." Id. at col. 7, ll 52-55.

(*Id.* at pp. 12-13.)

Plaintiff maintains that no construction of this term is necessary. (Doc. No. 32 at p. 6.) However, Plaintiff also notes that this particular claim term in the '015 Patent was recently construed *Noco Company, Inc. v. Shenzhen, supra*. In that case, the Special Master issued a Report & Recommendation in which he recommended the following construction of the term "output port:" "component through which power from an internal power supply is transmitted." (Doc. No. 32-1 at p. 13.) Neither party objected to the Special Master's proposed construction of this particular term

and Judge Boyko subsequently accepted and adopted it. *See Noco v. Shenzhen*, 2019 WL 1723358 at * 4.

In the instant case, Plaintiff asserts that “the Special Master’s prior construction of the phrase ‘output port’ is consistent with its use in the ‘015 Patent and should be adopted by this Court.” (Doc. No. 32 at p. 6-7.) In its Response Brief, Defendant does not directly address Plaintiff’s argument that the Special Master’s construction should be adopted with respect to this term. (Doc. No. 34.) Rather, Defendant simply references its prior argument (set forth above) and reiterates that “output port” should be construed as an “external opening” to receive the jumper cable plug. (*Id.* at p. 3.)

The Court finds the reasoning of the Special Master in *Noco v. Shenzhen*, *supra* to be instructive relative to the construction of the term “output port.” *See Kim v. The Earthgrains Co.*, 2005 WL 66071 at * 10 (N.D. Ill Jan. 10, 2005) (finding another district court’s claim construction to be instructive); *Lamps Plus v. Dolan*, 2003 WL 22435702 at * 2 (N.D. Tex. Aug. 26, 2003) (although courts cannot give preclusive effect to prior claim construction against new defendant, court may defer to previous claims construction on case by case basis).

For the following reasons, the Court agrees with Plaintiff that the Special Master’s construction of the term “output port” as a “component through which power from an internal power supply is transmitted” is consistent with the claim language and specification of the ‘015 Patent. While Defendant argues that the term “output port” should be construed as an “external opening,” the Special Master correctly noted that “an opening is not a positive structural recitation, but instead defines an absence of something (i.e., a hole defined by some surrounding structure).” (Doc. No. 32-1 at pp. 12-13.) The Court finds that it makes more logical sense to construe the term “output port” in the ‘015 Patent as a structural element; i.e. a component through which power is transmitted from

the internal power supply. The Court agrees with the Special Master that this construction (i.e., the output port as a “component” rather than an “external opening”) is more consistent with the claim language and the specification.

Moreover, the Court rejects Defendant’s proposed inclusion of the term “supplied” in addition to the term “transmitted” with respect to this term. Defendant does not offer any explanation as to why the use of the term “supplied” is necessary or supported by either the claim language or the specification. Indeed, as Plaintiff correctly notes, Defendant provides no argument or evidence that the output port “supplies” power.⁴ Thus, the Court rejects Defendant’s proposed use of the term “supplied.”

Accordingly, and for all the reasons set forth above, the Court construes the term “output port” in the ‘015 Patent as follows: “component through which power from an internal power supply is transmitted.”

c. “Vehicle Battery Isolation Sensor Connected in Circuit” and “Reverse Polarity Sensor Connected in Circuit”

Defendant proposes that the term “vehicle battery isolation sensor connected in circuit” be construed as follows: “a vehicle battery isolation sensor separate from the reverse polarity sensor and a jumper cable.” (Doc. No. 31 at p. 13.) Defendant proposes the term “reverse polarity sensor connected in circuit” be construed as follows: “a reverse polarity sensor separately connected to a distinct circuit from the vehicle battery isolation sensor and a jumper cable.” (*Id.*)

⁴ The Court notes that the terms “supplied” and “transmitted” are generally defined as having different meanings. The Merriam-Webster Dictionary defines the word “supplied” as (1) to make available for use, to satisfy the needs or wishes of, to provide for; (2) to substitute for another; or (3) to add as a supplement. That Dictionary defines the word “transmitted” as (1) to send or convey from one person or place to another, to cause or allow to be spread; (2) to cause something to pass or be conveyed through space or a medium, to admit the passage of, to send out (a signal) either by radio waves or over a wire. *See* www.merriam-webster.com/dictionary.

In support of this proposed construction, Defendant argues that “vehicle battery isolation sensor” and the “reverse polarity sensor” should be construed as being separate from each other and separate from the jumper cable. (Doc. No. 31 at p. 13.) Defendant argues that “this construction is fully supported by the patent specification and the prosecution history of the ‘015 patent.” (*Id.*) Defendant asserts that nothing in the specification or the claims sets forth an embodiment of the device where the “vehicle battery sensor” and the “reverse polarity sensor” are contained in a single sensor or where these sensors are components of the jumper cable. (*Id.* at p. 14.) Finally, Defendant argues that Plaintiff has admitted in the prosecution history that the sensors are separate and distinct from one another.⁵ (*Id.*)

Plaintiff maintains that no construction of these terms is necessary. (Doc. No. 32 at p. 7-8.) However, Plaintiff also notes that the claim terms “vehicle battery isolation sensor” and “reverse polarity sensor” in the ‘015 Patent were recently construed by both the Special Master and the Court in *Noco v. Shenzhen, supra*. Plaintiff argues that “to the extent this Court believes construction is necessary, NOCO proposes that this Court adopt the Special Master’s construction of these claim terms.” (*Id.* at p. 8.)

In *Noco v. Shenzhen, supra*, the Special Master reviewed the prosecution history for the ‘015 Patent and found that “it is clear that the Patent Owner relied upon the ‘separate’ nature of the two sensors with respect to one another to overcome prior cited art.” (Doc. No. 32-1 at p. 9.) He

⁵ Defendant notes that, after the ‘015 Patent was issued, Dogguan Juxing Power Co., Ltd. filed a petition for an *inter partes* review with the Patent Trial and Appeal Board. (Doc. No. 31 at p. 6.) Plaintiff filed a Preliminary Response on May 7, 2018, which is attached as an exhibit to Defendant’s Markman Brief. (Doc. No. 31-3.) In that response, Plaintiff stated that Claim 1 of the ‘015 Patent ““has in essence a redundancy feature through which, unless the inputs from *two separate sensors* indicate that a battery is both present and connected with the proper polarity, the power switch will not be turned on, and the charging operation will never commence.” (Doc. No. 31-3 at pg. 4) (emphasis added). Plaintiff added that the patent “achieves the redundancy *through two separate, fully disclosed sensors*, shown in Figure 2A-4 of the Patent.” (*Id.*) (emphasis added).

concluded that it was therefore “appropriate to characterize the two sensor elements in the claim construction as ‘separate’ from one another.” (*Id.*) The Special Master rejected the additional use of the word “distinct” as redundant. (*Id.*)

The Special Master then considered, and rejected, the argument that the two sensors are separate from the jumper cable, as follows:

Lastly, Defendant argued that the two sensors are not only separate from one another, but also separate from a jumper cable. ... In support for this position, Defendant asserted that "neither the specification nor the claims envision an embodiment where the 'vehicle battery isolation sensor' and 'reverse polarity sensor' are components of the jumper cable. As such, the two sensors must also be separate from the jumper cable." ...

Claim 1 uses the term "comprising" as its transitional phrase, which the courts have construed as being open-ended. *CIAS v. Alliance Gaming Corp.*, 504 F.3d 1356 (Fed. Cir. 2007). Consequently, the lack of explicit, differing embodiments does not operate to inferentially limit the claim. In fact, while Figs. 3-4 of the '015 Patent illustrate sensor components within a housing 300, and a jumper cable 400 external to the housing, the '015 patent disclosure states:

The invention having been thus described, it will be apparent to those skilled in the art that the same may be varied in many ways without departing from the spirit or scope of the invention. Any and all such variations are intended to be encompassed within the scope of the following claims.

(See Col. 7, line 65 - Col. 8, line 2 of the '015 Patent).

Since no statements exist in the detailed description requiring the sensors being separate from the jumper cable, and no prosecution history indicates applicant's intention that the jumper cable be separate from the sensors, such language regarding the jumper cable should not be included in the claim construction. Thus the following constructions are recommended: (1) a reverse polarity sensor separate from the vehicle battery isolation sensor, and (2) a vehicle battery isolation sensor separate from the reverse polarity sensor.

(Doc. No. 32-1 at p. 9-10.)

Shenzhen thereafter filed an Objection to the above construction. Judge Boyko rejected Shenzhen's objection and adopted the Special Master's construction:

Upon review of the Special Master’s Proposed Constructions, Defendants’ Objections and Plaintiff’s Response, the Court overrules Defendants’ Objections and adopts the Special Master’s Proposed Construction of “reverse polarity sensor” and “vehicle battery isolation sensor.” The Court agrees with the Special Master that Claim 1 should not be construed to require the sensors be separate from a jumper cable. As the Special Master correctly recited, Claim 1 begins, “Apparatus for jump starting a vehicle engine, comprising:.” The Federal Circuit has held “In the patent claim context the term “comprising” is well understood to mean “including but not limited to.” *CIAS, Inc. v. All. Gaming Corp.*, 504 F.3d 1356, 1360 (Fed. Cir. 2007). In *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 811 (Fed.Cir.1999) the Federal Circuit explained that patent drafters “use the signal ‘comprising,’ which is generally understood to signify that the claims do not exclude the presence in the accused device or method of factors in addition to those explicitly recited.” The patent disclosure further contains the following language: “the invention having been thus described, it will be apparent to those skilled in the art that the same may be varied in many ways without departing from the spirit or scope of the invention. Any and all such variations are intended to be encompassed within the scope of the following claims.” (‘015 Patent, Col 7, line 65, Col 8, line 2). Thus, the term “comprising” does not limit the claim to only those embodiments as described therein and the patent disclosure further recognizes other variations will be encompassed in the patent’s scope.

Also, because the claim does not describe how the sensors are to be connected in circuit with the jump starter’s positive and negative polarity outputs, the claim language does not preclude embodiments where conceptually the sensors may be located on jumper cables. Moreover, dependent Claim 21 clearly contemplates the use of jumper cables. Thus, a plain reading of the language of Claim 1 does not impose a limitation that the sensors be separate from a jumper cable and the Court agrees with the Special Master’s Proposed Construction and adopts the same.

Noco v. Shenzhen, 2019 WL 1723358 at * 5.

Defendant argues that “[i]n every possible embodiment included in the ‘015 Patent the jumper cable is external to the vehicle battery charger,” and is not an element of the device. (Doc. No. 34 at p. 4.) Defendant asserts as follows:

Further, a construction that would allow the “vehicle battery isolation sensor” and “reverse polarity sensor” to be located on the jumper cables would contradict the plain language of Claim 1. Claim 1 purports that the “vehicle battery isolation sensor” and the “reverse polarity sensor” must be “connected in circuit with said positive and negative polarity outputs.” As the jumper cable is external and separate to the positive and negative polarity outputs, a sensor that is located on the jumper cables cannot be “connected in circuit” with the polarity output port because it can be manually

separated from the device by the user. Therefore, construing the “vehicle battery isolation sensor” and the “reverse polarity sensor” to be separate from the jumper cable is consistent with the plain claim language in Claim 1 of the ‘015 patent.

(*Id.*)

Plaintiff argues that Defendant’s argument must fail because it seeks to limit the claim to its preferred embodiment. (Doc. No. 35 at p. 9.) Plaintiff further argues that there is nothing in the language of the ‘015 Patent that requires that the sensors be contained within the portable device housing, while the jumper cable device is an attachment to the portable device. (*Id.*) In this regard, Plaintiff notes that dependent claim 21 expressly provides that the device of claim 1 also comprises jumper cables. (*Id.* at p. 10.)

The Court agrees with Plaintiff that the Special Master’s construction of the terms “vehicle battery isolation sensor” and “reverse polarity sensor” is instructive and persuasive. Based on the prosecution history noted by the Special Master in *Noco v. Shenzhen, supra* and set forth above, the Court agrees that the two sensors are “separate” from one another. The Court finds that Defendant’s proposed use of the additional term “distinct” is redundant and unnecessary.

That leaves the issue of whether the sensors should be construed as separate from the jumper cables. For the following reasons, the Court agrees with the reasoning set forth in *Noco v. Shenzhen, supra* and finds that a plain reading of the language of Claim 1 does not impose a limitation that the sensors be separate from the jumper cable. As Plaintiff correctly notes, Claim 1 of the ‘015 Patent uses the term “comprising” as its transitional phrase, which the Federal Circuit has found to be open-ended. *See CIAS Inc. v. All. Gaming Corp.*, 504 F.3d 1356, 1360 (Fed. Cir. 2007) (“In the patent claim context the term ‘comprising’ is well understood to mean ‘including but not limited to.’”); *Vivid Techsn, Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 811 (Fed. Cir. 1999) (explaining that patent

claims “use the signal ‘comprising,’ which is generally understood to signify that the claims do not exclude the presence in the accused device or method of factors in addition to those explicitly recited.”). Moreover, as noted above, the ‘015 Patent specifically states that “the invention having been thus described, it will be apparent to those skilled in the art that the same may be varied in many ways without departing from the spirit or scope of the invention.” *See* ‘015 Patent at Col. 7, lns 65-68 to Col. 8, ln 1. Thus, the Court rejects Defendant’s proposed construction that the sensors are separate from the jumper cable, as improperly attempting to limit the claim to its preferred embodiment.

The Claim’s use of the phrase “connected in circuit” does not require a different result. The fact that the claim provides that the sensors must be connected in circuit with the polarity outputs does not necessarily require that they be separate from the jumper cables. As Judge Boyko noted in *Noco v. Shenzhen*, “because the claim does not describe how the sensors are to be connected in circuit with the jump starter’s positive and negative polarity outputs, the claim language does not preclude embodiments where conceptually the sensors may be located on jumper cables.” *Noco v. Shenzhen*, 2019 WL 1723358 at * 5. Defendant has not pointed to any language in the claim or the specification that would require a different result.

Accordingly, the Court construes the terms “vehicle battery isolation sensor connected in circuit” as follows: “a vehicle battery isolation sensor separate from the reverse polarity sensor.” The Court construes the term “reverse polarity sensor connected in circuit” as: “a reverse polarity sensor separate from the vehicle battery isolation sensor.”

d. “Power Switch connected between said internal power supply and said output port”

Defendant argues that this term should be construed as follows: “power switch is in electronic communication with and physically positioned between the internal power supply, which is housed in the apparatus, and the output port.” (Doc. No. 31 at p. 18.) Defendant maintains that “connected between” refers to an electronic communication that controls the flow of power from the internal power supply to the output port. (*Id.*) It asserts that, to control this flow of power, the power switch must be located within the housing of the device and be interposed between the internal power supply and the external opening of the output port. (*Id.*) Defendant argues this construction is consistent with the remainder of Claim 1, as follows:

Claim 1 later indicates that the power switch causes a connection of power from the internal power supply to the output port if the signals from the vehicle isolation sensor and the reverse polarity sensor indicate that the jumper cables are properly connected to the car battery. (‘015 patent, col. 8, ll 25-37.) As such, the power is switched off after the power travels from the internal power supply but prior to it reaching the output port for the jumper cables and the output port is not powered until it receives those signals from the sensor. Therefore, the power switch must be physically located within the connection between the internal power supply and the output port to cause or prevent that electronic connection. This is also reflected in all of the embodiments of the device included in the patent specification and there is no suggestion that the power switch could operate as described without being located between the internal power supply and the output port.

(*Id.* at p. 19.)

Plaintiff argues no construction is necessary for this term, and notes that both the Special Master and Judge Boyko in *Noco v. Shenzhen, supra* reached the same conclusion. (Doc. No. 32 at p. 8.) Plaintiff asserts that non-technical terms such as “connected” should not be construed for the trier of fact. (*Id.* at p. 9.) Plaintiff further argues that Defendant’s use of the phrase “housed in the apparatus” is an impermissible attempt to limit the ‘015 Patent to its preferred embodiment. (*Id.*)

In *Noco v. Shenzhen, supra*, the Special Master found that no construction was necessary for this term. In so doing, the Special Master rejected a nearly identical proposed construction raised by

defendants therein, finding that the prosecution history, claim language, and representative figures did not describe any unique positioning of the power switch. *Noco v. Shenzhen*, 2019 WL 1723358 at * 6. Judge Boyko overruled defendant's objection and adopted the Special Master's proposed construction of this term. *Id.*

The Court agrees with the Special Master and the court in *Noco v. Shenzhen, supra* that the claim language and specification of the '015 Patent are silent as to the physical location of the power switch. Moreover, Defendant does not cite any source from the prosecution history to support its proposed construction placing the power switch inside the apparatus. The Court agrees with Plaintiff that Defendant's proposed construction would impermissibly limit the '015 Patent to its preferred embodiment. *See Phillips*, 415 F.3d at 1232 (noting that "we have expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.")

Accordingly, the Court agrees with both Plaintiff and the reasoning set forth in *Noco v. Shenzehn, supra* and finds that this term is clear and unambiguous on its face and needs no construction.

e. "Input signals from said vehicle isolation sensor and a separate input signal from said reverse polarity sensor"

Defendant argues that this term should be construed as follows: "an input signal received from said vehicle isolation sensor and a separate input signal received from said reverse polarity sensor." (Doc. No. 31 at p. 13.) Defendant maintains that the specification and prosecution history support its proposed construction that the sensors send distinct signals to the microcontroller. (*Id.*)

Plaintiff argues that no construction is necessary for this term. (Doc. No. 32 at p. 9-10.) However, to the extent the Court determines construction is necessary, Plaintiff argues this Court

should adopt the Special Master's prior construction of this term in *Noco v. Shenzhen, supra*, which Plaintiff states is "consistent with the plain language of the '015 Patent and its prosecution history." (*Id.* at p. 10.)

The Special Master's prior construction of this term, which was adopted by Judge Boyko in *Noco v. Shenzhen, supra*, is as follows: "distinct input signals from said vehicle isolation sensor and reverse polarity sensor, respectively." (Doc. No. 32-1 at p. 11.) The Special Master explained as follows:

The Plaintiff contends that no construction is necessary, while the Defendant argues that the above phrase should be interpreted as "an input signal received from said vehicle isolation sensor and a distinct input signal received from said reverse polarity sensor." (See Plaintiffs Opening Claim Construction Brief, Section F, pp. 10-11; Defendant's Opening Claim Construction Brief, Section B, pp. 12-15).

While the sensors 10 and 12 disclosed in Figs. 2A-4 show unique outputs CBREV and CBOON, respectively, that are provided to separate pins of a microcontroller MCU as input signals (see Fig. 2A-1, 2A-2 and 2A-4), no teaching exists within the detailed description of the '015 patent that indicates such an arrangement is required. However, in the Patent Owner's IPR Preliminary Response, in distinguishing over the Krieger reference, the Patent Owner stated:

... nothing in Krieger discloses that the switch 12 is initially turned on in response to signals received from both the reverse polarity sensor and a vehicle isolation sensor. Instead it is clear from the disclosure that the switch in Krieger will be turned on only in response to a correct polarity being detected by the reverse polarity sensor, without regard to any separate information provided by any other circuit element.

(IPR Preliminary Response, p. 19, lines 4-9)(Emphasis added).

From this statement, the Patent Owner was clearly indicating that each of the sensors provide sensed information that is separate from one another. In a signal sense this is relevant, as one of ordinary skill in the art knows that two signals from separate sensors can nevertheless combine by superposition, but in this instance, according to the Patent Owner, the information provided by each sensor remains separate or distinct.

This point was recognized by the PTAB, wherein in the IPR Decision, which was a decision to deny institution of the IPR proceeding, the Panel stated:

Consistent with Patent Owner's arguments, see Prelim. Resp. 17-20, the claim requires the microcontroller to process two distinct signals before providing an output signal to turn the power switch on.

(See Decision, IPR2018-00503, p. 12, section 3, lines 231-24). Further, the PTAB stated:

Patent Owner reasonably describes this as a 'redundancy feature through which ... the power switch will not be turned on' unless distinct signals indicate the presence of a battery and a proper polarity connection of the battery.

(Id. at p. 12, line 27 -p. 13, line 2). And finally, the PTAB stated:

As set forth above, limitations [f] and [g] of claim 1 require the microcontroller to process two distinct signals before providing an output signal to turn the power switch on

(Id. at p. 19, lines 2 3-2 5).

Thus the Patent Owner stressed the receipt of separate information from the input signals output by the sensors, which the PTAB reasonably concluded to be distinct signals. Thus, it is recommended that the above phrase be construed as "distinct input signals from said vehicle isolation sensor and said reverse polarity sensor, respectively."

(Doc. No. 32-1 at pp. 10-11.)

The Court agrees with the Special Master's reasoning, above, and finds that his proposed construction is consistent with the prosecution history detailed above. Accordingly, the Court construes the term "input signals from said vehicle isolation sensor and said reverse polarity sensor" as follows: "distinct input signals from said vehicle isolation sensor and reverse polarity sensor, respectively."

f. "such that said power switch is turned on to cause said internal power supply to be connected to said output port in response to signals from said sensors indicating the presence of a vehicle battery at said output port and proper polarity connection of positive and negative terminals of said vehicle battery with said positive and negative polarity

outputs, and is not turned on when signals from said sensors indicate either the absence of a vehicle battery at said output port or improper polarity connection of positive and negative terminals of said vehicle batter with said positive and negative polarity outputs"

Defendant argues that that the above term should be construed as follows: "Such that said power switch is turned on to cause the internal power supply to be connected to the output port in response to a signal from the vehicle battery isolation sensor indicating the presence of a vehicle battery at the output port and a separate signal from the reverse polarity sensor indicating proper polarity connection of positive and negative terminals of the vehicle battery with the positive and negative polarity outputs, and is not turned on when the signal from the battery isolation sensor indicates the absence of a vehicle battery at the output port or when the reverse polarity sensor indicates improper polarity connection of positive and negative terminals of the vehicle battery with the positive and negative polarity outputs." (Doc. No. 31 at p. 18) (proposed changes from '015 Patent underlined).

Plaintiff argues no construction is necessary for this term, and notes that both the Special Master and Judge Boyko in *Noco v. Shenzhen, supra* reached the same conclusion. (Doc. No. 32 at p.11-12.) Specifically, Plaintiff asserts that the meaning of this claim term is readily apparent from a review of the '015 Patent claim language and that "repeating the name of each respective sensor multiple times in the same claim step is redundant, cumbersome, and unnecessary." (*Id.* at p. 12.) Moreover, Plaintiff argues that Defendant "has not pointed to any ambiguity, technical requirements, or other reason that might support a reason to construe these terms." (Doc. No. 35 at p. 16.)

The Court agrees with Plaintiff. Defendant has not identified a need to specify, in this term, that the signals are distinct as that is properly addressed in the claims constructions above, most

notably this Court’s construction of the term “input signals from said vehicle isolation sensor and said reverse polarity sensor.” Further, the Court agrees with Plaintiff that the additional language proposed by Defendant would overly complicate an already lengthy term.

Accordingly, the Court finds that no construction is necessary for this term.

2. Claim 9: “internal components of the apparatus”

Claim 9 of the ‘015 Patent provides as follows: “The apparatus of claim 1, further comprising a voltage regulator configured to convert output voltage of said internal power supply to a voltage level appropriate to provide operating power to internal components of the apparatus.” *See* ‘015 Patent at Col. 8, lns. 61-64.

Defendant argues that the term “internal components of the apparatus” should be construed as “components housed within said apparatus.” (Doc. No. 31 at p. 19.) Defendant’s entire argument as to this term is as follows: “This is simply a clarification to indicate that the component must be housed within the device, otherwise they could not be internal components. (See ‘015 Patent, Figure 3 (a perspective view of the handheld jump starter device), col 3, ll. 56-58, and col. 7, ll. 31-37). This construction is consistent with the claim language and patent specification and should be adopted by the Court.” (*Id.* at p. 20.)

Plaintiff argues that no construction is necessary for this term. (Doc. No. 32 at p. 13.) It argues that Defendant’s construction is an attempt to impermissibly limit the ‘015 Patent to its preferred embodiment by defining the term “internal” to mean “housed within said apparatus.” (*Id.*) Plaintiff further asserts that the term “internal” is a non-technical term that does not require construction. (Doc. No. 35 at p. 17-18.)

The Court agrees with Plaintiff for the reasons discussed *supra* in connection with its analysis of the claim 1 term “internal power supply.” Defendant has not demonstrated that construction of the term “internal components of the apparatus” is necessary. Moreover, Defendant has failed to show that the term “internal components of the apparatus” should be restricted to its preferred embodiment of “component housed within the apparatus.”

Accordingly, the Court rejects Defendant’s proposed construction of the term “internal components of the apparatus” and, further, agrees with Plaintiff that Defendant has failed to demonstrate that this particular claim term requires construction.

3. Claim 19: “is unable to”

Claim 19 provides as follows: “The apparatus of claim 1, further comprising a manual override switch configured to activate a manual override mode to enable a user to connect jump start power to said output port when said vehicle battery isolation sensor is unable to detect presence of a vehicle battery.” *See* ‘015 Patent, Col. 10, lns. 1-5.

Defendant argues that the term “is unable to” should be construed to mean “does not.” (Doc. No. 31 at p. 20.) Defendant’s entire argument as to this claim is as follows: “This is to clarify that when the vehicle battery isolation sensor does not detect the presence of a vehicle battery, the manual override switch can be activated. This construction is consistent with the claim language and patent specification. Therefore, it should be adopted by the Court.” (*Id.*)

Plaintiff argues that no construction is necessary for this term. (Doc. No. 32 at p. 14.) It maintains that the term “is unable to” is non-technical and its meaning is readily apparent to a lay juror. (Doc. No. 35 at p. 19.)

The Court agrees with Plaintiff. Defendant has not demonstrated that construction of the term “is unable to” is necessary. Accordingly, the Court rejects Defendant’s proposed construction of the term “is unable to” and, further, agrees with Plaintiff that Defendant has failed to demonstrate that this particular claim term requires construction.

IV. Conclusion

For the reasons set forth above, Plaintiff’s Renewed Motion to Strike, in Part, Defendant’s Amended Invalidity Contentions (Doc. No. 28) is DENIED. The Court’s construction of Claims 1, 9 and 19 of U.S. Patent No. 9,007,015 is set forth above.

IT IS SO ORDERED

Date: April 16, 2020

s/Pamela A. Barker
PAMELA A. BARKER
U. S. DISTRICT JUDGE